

REMARKS/ARGUMENTS

Claims 5, 11, 13, and 16 are canceled without prejudice. New claims 19 and 20 are added. Claims 17, and 18 are amended. Claims 1-4, 6-10, 12, 14, 15, 17, and 18-20 are pending in the application.

Examples of support for new claims can be found in applicant's specification at FIG. 2. The figure illustrates a Step 103, which determine whether a communication quality (C/I) of a current pilot (A) is greater than a preset value  $\alpha$ . If A is greater than  $\alpha$ , than the device proceeds to change the handoff criterion (step 104). Applicant's specification at page 22, lines 4-7 provides that the signal strength may be used instead of communication quality C/I.

Concerning claim amendment to claims 17 and 18, FIG. 3 illustrates a step 201, which detects that the current pilot signal X is switched to return to a previous pilot signal A. At step 202, the terminal determines whether the time during which the pilot signal is X is shorter than a predetermined value  $\delta$  (page 17, lines 19-22). If the time is shorter, the device proceeds to change the handoff criterion (FIG. 3, Step 204 and the subsequent steps).

Reconsideration of the claims, as amended, is respectfully requested.

CLAIM REJECTIONS UNDER 35 U.S.C. § 102:

Claims 1-4, 7-10, 14, 15, 17, and 18 stand rejected under 35 U.S.C. § 102(b) as obvious over Cuffaro (U.S. Patent No. 5,999,814). Applicant submits that the claims of present application patently distinguish over the cited art. Claim 1 is as follows:

A wireless communication terminal comprising:  
a measurement section that measures quality of a  
signal transmitted from a base station;

a determination section that determines whether or not handoff is to be performed based on a measurement result of the measurement section and a criterion of the determination of the handoff; and

a handoff section that performs the handoff based on a determination result of the determination section,

wherein the determination section determines whether the handoff section has performed a predetermined repetition pattern of handoffs, and changes the criterion of the determination of the handoff if it is determined that the handoff section has performed the predetermined repetition pattern of handoffs.

One aspect of claim 1 provides that the determination section of a wireless communication terminal determines whether to perform a handoff based on a handoff criterion. The handoff criterion is changed when a handoff section has performed a predetermined repetition pattern of handoffs. FIG. 2 of applicant's specification provides an example of changing the handoff criterion. In step 104, the predetermined pattern of handoffs is detected and the handoff criterion is changed. In the example provided in the specification, the threshold value for determining an idle handoff is  $\gamma$ . After the predetermined pattern is detected, the threshold value is changed to  $X + \gamma$  (applicant's specification FIG. 2; page 14, lines 6-21).

The cited art does not anticipate claim 1 because the cited art does not teach or suggest each and every limitation of claim 1. For example, Cuffaro does not teach or suggest, at least, the limitation "the determination section ... changes the criterion of the determination of the handoff if it is determined that the handoff section has performed the predetermined repetition pattern of handoffs."

Cuffaro is generally directed at a method of handling oscillating mobile station handoffs between cells in a cellular telecommunication network (Abstract). However, Cuffaro does not teach or suggest the mobile station "chang[ing] the

criterion of the determination of the handoff," when the mobile station detects that the mobile station has performed the predetermined repetition pattern of handoffs.

Cuffaro at FIG. 2B illustrates a step 21 for detecting a handoff "pattern." (Applicant does not necessarily agree that FIG. 2B, step 21 corresponds with the required pattern of claim 1. But such determination is moot because, even if step 21 does correspond to the required pattern, Cuffaro still does not disclose the required limitation, as discussed herein.) FIG. 3 illustrates that, when the oscillating handoff pattern is detected, a step is performed (Step 32) to determine whether the signal strength is above a safe threshold. If the signal strength is below the safe threshold, handoff operations are allowed (Step 33). If the signal is above the safe threshold, handoff operations are inhibited for a period of time (Step 35).

Given that the mobile station does not make any handoff during the period of time, the mobile station has no use for the handoff criterion, let alone changing the criterion as required claim 1.

In sum, Cuffaro teaches a method to allow handoff operations or inhibit handoff operations for a period of time. Cuffaro does not teach or suggest "chang[ing] the criterion of the determination of the handoff."

Given that Cuffaro does not teach or suggest each and every limitations of claim 1 as discussed above, the 102(b) rejection to claim 1 should be withdrawn. Claim 7 recites analogous limitations not taught or suggested by the cited art, as discussed with claim 1. For example, claim 7 includes the limitation "changing the criterion of the determination of the handoff if it is determined that the handoff section has performed the predetermined repetition pattern of handoffs...." As discussed with claim 1, Cuffaro does not teach or suggest at least that limitation of claim 7.

For the above reasons, withdrawal of the 102(b) rejections to claims 1 and 7 and allowance of those claims are respectfully requested. Claims 2-4 and 14 depend from claim 1 and are allowable at least for the same reasons as claim 1. Allowance of claims 2-4 and 14 is thus respectfully requested. Claims 8-10 and 15 depend from claim 7 and are allowable at least for the same reasons as claim 7. Allowance of claims 8-10 and 15 is thus respectfully requested.

Claims 17 and 18

Claims 17 and 18 patentably distinguish over the cited art. Claim 17 recites:

A wireless communication terminal comprising:

- a measurement section that measures quality of a signal transmitted from a base station;
- a determination section that determines whether or not handoff is to be performed based on a measurement result of the measurement section and a criterion of the determination of the handoff;
- a handoff section that performs the handoff based on a determination result of the determination section;
- a detection section that detects a time period during which a pilot signal is acquired; and
- a change section that, when a handoff is performed so that a currently acquired pilot signal is switched to return to a same pilot signal that is same as a preceding pilot signal, changes the criterion of the determination of the handoff based on time period during which the currently acquired pilot signal is acquired until returning to the same pilot.

An embodiment of claim 17 can be found in FIG. 3 and the accompanying text. At step 201, the current pilot signal X is switched to return to a previous pilot signal A (the A-X-A pattern). At step 202, the terminal determines whether the time during which the pilot signal is X is shorter than a predetermined value  $\beta$

(page 17, lines 19-22). If the time is shorter, the device proceeds to change the handoff criterion (FIG. 3, Step 204 and the subsequent steps).

The cited art does not anticipate claim 17 because the cited art does not teach or suggest each and every limitation of claim 17. For example, Cuffaro does not teach or suggest, at least, the limitation "a change section that, when a handoff is performed so that a currently acquired pilot signal is switched to return to a same pilot signal that is same as a preceding pilot signal, changes the criterion of the determination of the handoff based on time period during which the currently acquired pilot signal is acquired until returning to the same pilot."

The Action at page 4, last paragraph, cites Cuffaro for teaching a step of determining whether the signal strength in a serving cell is above a safe threshold. If it is above the safe threshold, the handoff operations are inhibited for a period of time (FIG. 3, steps 32-35). The Action argues those steps correspond to changing the handoff criterion as required by claim 17. However, Cuffaro does not teach or suggest changing the handoff criterion based on any time period, let alone a time period during which the currently acquired pilot signal is acquired until returning to the same pilot.

Accordingly, Cuffaro does not teach or suggest at least those limitations of claim 17. Claim 18 recites analogous limitations not taught or suggested by the cited art, as discussed with claim 17. For example, claim 18 includes the limitation "when a handoff is performed so that a currently acquired pilot signal is switched to return to a same pilot signal that is same as a preceding pilot signal, changing the criterion of the determination of the handoff based on time period during which a the currently acquired pilot signal is acquired until returning to the same pilot signal," which is analogous to the limitation of 17 discussed above.

Given that Cuffaro does not teach or suggest each and every limitations of claims 17 and 18 as discussed above, the 102(b) rejection to claims 17 and 18 should be withdrawn. Withdrawal of the 102(b) rejections of claims 17 and 18 and allowance of those claims are respectfully requested.

New Claims 19 and 20

Claims 19 and 20 recite analogous limitations. Claim 19 depends from claim 1, and therefore, claim 19 should be allowed at least for the reasons as claim 1 discussed above. Claim 20 depends from claim 7, and therefore, claim 20 should be allowed at least for the reasons as claim 7 discussed above.

Moreover, claims 19 and 20 recite additional limitations not taught or suggested by the cited art.

Claim 19 requires:

the determination section changes the criterion of the determination of the handoff if it is determined that the handoff section has performed the predetermined repetition pattern of handoffs, and a strength or a quality of a current signal is below a predetermined threshold.

Applicant's specification at FIG. 2 illustrates a Step 103, which determines whether a communication quality (C/I) of a current pilot (A) is greater than a preset value  $a$ . If  $A$  is greater than  $a$ , then the device proceeds to change the handoff criterion (step 104). Applicant's specification at page 22, lines 4-7 provides that the signal strength may be used for this step.

Cuffaro does not teach or suggest at least the above limitation.

Cuffaro at FIG. 2B illustrates a step 21 for detecting a handoff "pattern." As discussed above, Cuffaro at FIG. 3 illustrates that, when the oscillating handoff pattern is detected, a step is performed (Step 32) to determine whether the signal

strength is above a safe threshold. If the signal strength is **below** the safe threshold, handoff operations are allowed (Step 33). If the signal is above the safe threshold, handoff operations are inhibited for a period of time (Step 35).

Accordingly, Cuffaro teaches allowing handoff operations when the signal strength is **below** the safe threshold. In contrast, claim 1 requires changing the handoff criterion when the signal strength is **above** a threshold. Cuffaro thus does not teach or suggest those limitations.

For the above reasons, claim 19 is allowable over Cuffaro, and such allowance is respectfully requested. Claim 20 recites analogous limitation as claim 19 discussed above not taught or suggested by Cuffaro. Thus, claim 20 is likewise allowable over Cuffaro, and such allowance is respectfully requested.

**CLAIM REJECTIONS UNDER 35 U.S.C. § 103:**

Claims 6 and 12 stand rejected under 35 U.S.C. § 103(a) as obvious over Cuffaro in view of Yun (U.S. Patent No. 7,016,323). Applicant submits that the claims 6 and 12 patently distinguish over the cited art.

As discussed above, Cuffaro does not teach or suggest each and every limitations of claims 1 and 7. For example, Cuffaro does not teach or suggest the limitation "the determination section determines whether the handoff section has performed a predetermined repetition pattern of handoffs, and changes the criterion of the determination of the handoff if it is determined that the handoff section has performed the predetermined repetition pattern of handoffs" of claim 1.

The combination of Cuffaro and Yun likewise does not teach or suggest at least the above limitation of claim 1, because Yun does not remedy the deficiencies of Cuffaro. Yun is generally directed to an apparatus and method for transmitting forward link data to a handoff mobile station in a CDMA communication system

(Abstract). The Action at page 7 cites Yun for disclosing a method and system handling handoff for mobile station CDMA20001x and 1xEVDO. Yun, however, does not teach or suggest the required determination section of claim 1.

For the above reasons, Cuffaro and Yun, even combined, do not render obvious claim 1. Claim 1 is thus allowable over Cuffaro and Yun. Claim 7 is allowable over the same on same at least for reciting analogous limitations discussed with claim 1.

Claim 6 depends from claim 1, and claim 12 depends from claim 7. Claims 6 and 7 are allowable over the cited art for at least the same reasons as their respective base claims, as discussed above.

In view of the foregoing, it is respectfully submitted that the application is in condition for allowance. Reexamination and reconsideration of the application, as amended, are requested.

Appl. No. 10/542,225  
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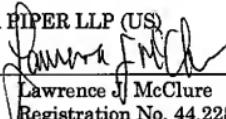
Attorney Docket No. 374611-000212  
Customer No.: 73230

If for any reason the Examiner finds the application other than in condition for allowance, the Examiner is requested to call the undersigned attorney at the Los Angeles, California telephone number (310) 595-3107 to discuss the steps necessary for placing the application in condition for allowance.

If there are any fees due in connection with the filing of this response, please charge the fees to our Deposit Account No. 07-1896.

Respectfully submitted,

DLA PIPER LLP (US)

By: 

Lawrence J. McClure  
Registration No. 44,228  
Attorney for Applicant(s)

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1999 Avenue of the Stars, Suite 400  
Los Angeles, California 90067  
Telephone: 310-595-3000  
Facsimile: 310-595-3400